

MAYBOROD, T.A.

Programming and automation control of raw materials, semi-finished products and finished product handling.

Report to be presented at the Third All-Union Conference on automation and mechanisation of major rubber production processes, Dnepropetrovsk, 2-6 Oct 62

1. MAYBORODA, A. A.
2. USSR (600)
4. Brucellosis
7. Experiments in treating brucellosis with inactivated and living vaccine.  
Nauch. trudy UIEV 18. 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

MAYBORODA, A.D.; LIKHACHEVA, N.V., prof., nauchnyy rukovoditel' raboty

Effect of the duck hepatitis virus on the kidney tissue  
culture cells of chicks and duck embryos. Veterinariia  
42 no.8:28-30 Ag '65. (MIRA 18:11)

1. Starshiy veterinarnyy vrach Gosudarstvennogo nauchno-  
kontrol'nogo instituta veterinarnykh preparatov (for  
Mayboroda).

MAKAROVA, G.A., kand. veter. nauk; MAYBORODA, A.D., mladshiy nauchnyy  
sotrudnik

Streptococcosis in chicks. Veterinariia 42 no.8:47-48  
Ag '65. (MIRA 18:11)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh  
preparatov.

MAYBORODA, A.N., inzh.; ROLINSKIY, V.Yu., kand.tekhn.nauk

Diametrical fans. Sudostroenie 30 no.1:26-27 Ja '64.  
(MIRA 17:3)

1 29348-66 ENP(m)/ENT(a)/ENT(1)/I/ENP(1) IJP(c)

ACC NO. AR6002854

(N)

SOURCE CODE: UR/0021/65/000/012/1583/1585

AUTHOR: Mayboroda, O. M.---Mayboroda, A. N.

60

B

ORG: Institute of Applied Thermophysics, AN UkrSSR (Instytut  
tekhnichnoyi teplofizyky AN UkrSSR)

TITLE: <sup>16</sup>Mathematic model of flow<sup>1</sup> in a blower with transverse flow

SOURCE: AN UkrSSR. Dopovid, no. 12, 1965, 1583-1585

TOPIC TAGS: fluid flow, fluid mechanics, mathematic model, industrial  
blower, function, transverse flow

ABSTRACT: The conditions of flow in various types of blowers with  
transverse flow are discussed. The problem of determining the form  
of the internal guiding device for a blower equipped with such a  
device is formulated. A pattern of boundary conditions is developed  
and a solution for the function of current flow in the guiding device  
is found. This paper was presented by Shvetz', I. T., Academician  
AN UkrSSR. Orig. art. has: 1 figure and 4 formulas.

SUB CODE: 20,12/ SUBM DATE: 05May64/ ORIG REF: 003/ OTH REF: 003

Card 1A CC

KONAREV, N.S. (Khar'kov); MAYBORODA, A.R., (Khar'kov)

Potential for increasing the traffic and carrying capacity of  
a railroad. Zhel. dor. transp. 45 no.11:8-12 N. '63.

(MIRA 16:12)

1. Zamestisl' nachal'nika Yuzhnoy dorogi (for Konarev).
2. Nachal'nik tekhnicheskogo otdela sluzhby dvizheniya  
Yuzhnoy dorogi (for Mayboroda).

VOZHKOVA, A.I., kand.med.nauk; MAYBORODA, A.Ya., inzh.-kapitan 2 rango

New experimental data on protecting the ear from noise by  
diesel engines. Voen.-med.zhur. no.6:24-27 Je '59.

(MIRA 12:9)

(NOISE, prev. & control

in operation of cutters with diesel engines (Rus))

MAYBORODA, B.

Repairing and improving the reliability of the T-9 taximeter.  
Avt. transp. 42 no. 5:27-29 My '64. (MIRA 17:5)

MAYBORODA, B. F.

Resolutions of the June Plenum of the Central Committee of  
the CPSU are being put into practice. Ugol' Ukr. 3 no.10:  
1-4 0 '59. (MIRA 13:2)

1. Zamestitel' zaveduyushchego otdelom tyazheloy promyshlennosti  
TSentral'nogo komiteta kommunisticheskoy partii Ukrainy.  
(Coal mines and mining) (Russia--Economic policy)

MAYBORODA, F. A.

On 20 December 1946, at the Power Engineering Institute imeni Molotov, defended his dissertation on "A Theoretical and Experimental Investigation of the Electric Drive of Auxiliary Machinery for Reversing Rolling Mills". Official opponents - Doctor of Technical Sciences Professor Ye. V. Nitsov, and Candidate of Technical Sciences M. G. Chilikin.

So: Elektrichestvo, No 4, April 1947, pp 90-94 ( U-5577, 18 February 1954 )

A theoretical and experimental analysis was presented of the electromechanical processes in the electric drive of auxiliary machinery for reversing rolling mills. A method was worked out for calculating the parameters of systems of low-power electric drive controlled by the Leonard system, and an example of calculation was given for the electric drive of a pressure instrument. A detailed experimental investigation was made of the electric drive of a number of auxiliary machines in the Zaporozhstal' slabbing mill and operational indexes were derived for electric drive under active working conditions. It was shown that the basic loading of the electric drive of roll tables, pressure instruments, and shears is a dynamic load. The possibility was demonstrated of re-switching some electric-drive motors operating in parallel to work in series for the purpose of reducing power losses while maintaining productivity. It was recommended that the Leonard system ~~be~~ be used with amplidyne control as the most highly perfected, economical, and promising type of electric drive for metallurgical plants.

So: IBID

SOV/176-58-7-16/17

AUTHORS: Mayboroda, G., Engineer-Colonel in the Reserve;  
Lyubinskiy M., Senior Scientific Worker at the  
Military Engineering Museum (Voyenno-Inzhenernyy  
muzey)

TITLE: The Fatherland Reveres Its Hero (Rodina chtit pamyat'  
geroya)

PERIODICAL: Voyenno-inzhenernyy zhurnal, 1958, Nr 7, pp 42-43 (USSR)

ABSTRACT: The authors give a short biography of Lieutenant General  
of the Engineers D.M. Karbyshev, who became a prisoner  
of war in 1941 and was killed at Mauthausen in Austria  
in February 1945. In 1958 a memorial plate was fixed  
to the wall of the house in which he lived before the  
war. Speeches were made during the ceremony. Engineer-  
Colonel-General A.I. Proshlyakov of the Defense  
Ministry of the USSR, spoke first, then Engineer  
Lieutenant General Ye.V. Leoshenya, who was Karbyshev's  
comrade at the Frunze Military Academy. Comrade

Card 1/2

SOV/176-58-7-16/17

The Fatherland Reveres Its Hero

Yu. Svinukhov spoke on behalf of the workers and employees of the Combine "Red Rose" ("Krasnaya Roza"). There are 3 photographs.

Card 2/2

IVANOV, Nikolay Nikolayevich, doktor tekhn. nauk, prof.; MOGILEVICH, Valentin Mikhaylovich, prof.; MAYBORODA, Gerasim Il'ich, dots.; BARZDO, Vladimir Ivanovich, dots.; ANDRULIONIS, Yevgeniy Petrovich, assistant; MOTYLEV, Yu.L., red.; TOPOL'NITSKAYA, L.P., red.izd-va; GORYACHKINA, R.A., tekhn. red.

[Highway construction] Stroitel'stvo avtomobil'nykh dorog.  
[By] N.N.Ivanov i dr. Moskva, Avtotransizdat. Pt.1. [Raising of the earth bed, construction of simple pavements and foundations] Vozvedenie zemlianogo polotna, ustroistvo pokrytii prosteishikh tipov i osnovanii. 1963. 463 p.  
(MIRA 17:2)

MAYBORODA, G.M.

Electroscopic investigation of the macromolecular structure of serum  
albumins and globulins. Biofizika 1 no.2:170-173 '56. (MLRA 9:9)

L.Voyenne-Morskaya meditsinskaya akademiya, Leningrad.  
(ALBUMINS) (GLOBULINS) (ELECTRON MICROSCOPY)

*MAY 60 R. O. D. A. N. M.*  
USSR/Virology - Bacteriophage (Phages)

4-1

Abstr Jour : Ref Zhur - Phage, No 5, 1958, 1958  
Author : M. V. Kozlov, L. M. Kozlov  
Inst : -  
Title : Thread-like formations in Preparations of Dysentery Phages.  
Orig Pub : Dokl. Akad. Nauk, 1958, 112, No 3, 700-702

Abstract : In preparations of dysentery phages, stored for long periods, thread-like structures are found, similar to chains of spherical elements described in the literature. The activity of the preparations was inversely proportional to the number of threads. The author believes that the threads are products of decomposition of the normal structure of phage particles. There are 4 electron photomicrographs.

Card 1/1

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.;  
MAYBORODA, G.M.

Staining *Salmonella typhosa* with fluorescent antibodies. Zhur.  
mikrobiol.epid. i imun. 30 no.1:97-102 Ja '58. (MIRA 12:3)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni Kirova.  
(*SALMONELLA TYPHOSA*,  
stain. by fluorescent antibodies (Rus))  
(ANTIBODIES,  
fluorescent antibodies, stain. of *Salmonella*  
*typhosa* (Rus))

MIKHAYLOV, Ivan Fedorovich; D'YAKOV, Sergey Ivanovich. Prinimali uchastie: DASHKEVICH, I.O.; YERMAKOV, N.V.; IVANOVA, M.T.; LI LI; OSIPOVA, I.V.; MAYBORODA, G.M.; USPENSKIY, V.I., red.; ZUYEVA, N.K., tekhn. red.

[Fluorescence microscopy; application in medical microbiology]  
Luminestsentnaya mikroskopiya; primeneniye v meditsinskoj mikrobiologii. Moskva, Medgiz, 1961. 222 p. (MIRA 15:1)  
(FLUORESCENCE MICROSCOPY) (MICROBIOLOGY)

MAYBORODA, G.M.; DASHKEVICH, I.O.

~~CONFIDENTIAL~~  
Purification of fluorescent conjugates from free fluoro-  
chrome using ion-exchange resins. Report No.1: Purification  
of antimicrobial fluorescent antibodies using ion exchange  
resin AB-17. Zhur. mikrobiol., epid. i immun. 40 no.3:55-59  
Mr '63. (MIRA 17:2)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni  
Kirova.

DASHKEVICH, I.O.; MAYBORODA, G.M.; GOL'DIN, R.B.

Purification of fluorescing conjugates from free fluorochrome with ion exchangers. Report No.2: Comparative results of purification of fluorescent antibodies by ion-exchange methods and filtration through gel. Zhur.mikrobiol., epid. i immun. 42 no.2:116-120 F '65. (MIRA 18:6)

1. Voenno-meditsinskaya ordena Lenina akademiya imeni Kirova.

**AUTHOR:** Mayboroda, I.K. 32-24-6-24/44

**TITLE:** On the Problem of Increasing the Reproducibility of Spectral Analysis (K voprosu uvelicheniya vosproizvodimosti spektral'nogo analiza)

**PERIODICAL:** Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp 748-750 (USSR)

**ABSTRACT:** The application of double pairs for calculating photography results is suggested. A consultation took place with the participation of N.V.Buyanov (TsNIIOM) and I.N.Treyger ("Zaporozhstal'-Works). The method suggested differs from the one usually employed by the fact that instead of  $\Delta S$  the value  $\Delta S + \Delta S_1$  is entered on the ordinate. Data of the analysis of agglomerates and bronzes as well as calibration diagrams with respect to CaO and SiO<sub>2</sub> are given in a table. By the aforementioned changed method of dealing with measuring results, errors in reproduction are reduced by 1.45 their amount, an exception being formed by zinc. Analysis is described as taking 20 - 25 minutes, and the fact is stressed that by means of this method errors can of course be reduced only if among the total number of errors the reproducibility error is the most important. The method is recommended as

Card 1/2

On the Problem of Increasing the Reproducibility  
of Spectral Analysis

32-24-6-24/44

being especially efficacious in work with solutions in which the error of reproducibility is not influenced by the heterogeneous character of the sample. The method is widely being employed for work carried out in the test laboratories of the "Zaporozhstal'" - Plant. There are 1 figure and 2 tables.

ASSOCIATION: Zavod "Zaporozhstal'" ("Zaporozhstal'" Plant)

1. Spectrographic cameras--Performance
  2. Photographic analysis
- Errors

Card 2/2

24(7)

SOV/48-23-9-52/57

AUTHOR: Mayboroda, I. K.

TITLE: On the Decrease of the Influence of Mineralogical Composition on the Results of the Spectral Analysis of a Fluxing Agglomerate

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1162 - 1163 (USSR)

ABSTRACT: In the present paper the investigation of the fluxing iron-calcium agglomerate of various plants is described. The investigations show a distinctly marked dependence of mechanical stability on chemical and mineral composition. The production of the pulverulent samples is described and the data of the arc light source are given. The iron content of the agglomerates was roughly 50%, but no linear dependence of  $\Delta S$  on the logarithm of the concentration ( $\log C$ ) was obtained.  $\Delta S$  denotes the blackening difference of a line pair. This is brought into connection with the stability of the agglomerates, the sintering conditions of the materials, and the cooling-conditions of the agglomerates. The petrographic analyses carried out by T. I. Litvinova show an influence exercised by granula-

Card 1/2

On the Decrease of the Influence of Mineralogical      SOV/48-23-9-52/57  
Composition on the Results of the Spectral Analysis of a Fluxing Agglomerate

tion upon  $\Delta$  S. The hard part of the agglomerate, which contains magnetite, consists of large grains, the part containing olivine, glass, and calcium silicates is only weakly granulated. In the case of a sufficiently fine pulverization of the samples, satisfactory accuracy of the analysis is attained. There are 1 figure and 4 Soviet references.

ASSOCIATION: Zavod "Zaporozhstal'" (Factory Zaporozhstal')

Card 2/2

MAYBORODA, I.K.; Primalni uchastiv: KOPIL, A.D. [Kopyl, A.D.], inzh.;  
SIROSHTAN, A.P., diplomant

Dependence of the intensity of analytical lines of fluxed sinter  
on the state of the components of the solid specimen. Ukr.fiz.zhur.  
6 no.6:853-859 N-D '61. (MIRA 16:5)

1. Ukgiprokol'ormet, m.Zaporizhzhya (for Mayboroda).
2. Zaporozhskiy staleplavil'nyy zavod (for Kopil).
3. Dnepropetrovskiy gosudarstvennyy universitet (for Siroshstan).  
(Spectrum analysis) (Iron-calcium alloys)

MAYBORODA, I.K.

Role of the natural aging of samples of a fluxed iron-calcium  
agglomerate during spectral analysis. Zav.lab. 29 no.5:557-558  
'63. (MIRA 16:5)

1. Ukrainskiy gosudarstvennyy proyektyny institut tsvetnoy  
metallurgii.

(Calcium) (Iron ores--Spectra)

GRIKIT, I.A.; ~~MAKARENKO~~, V.S.; SAMOKHVALOVA, I.M.; MAYBORODA, I.K.;  
BUBYR', S.I.

Spectrographic determination of copper, aluminum, and iron in a  
catalyst of organic synthesis. Zav. lab. 30 no.9:1096 '64.  
(MIRA 18:3)

1. Ukrainskiy gosudarstvennyy proyektyny institut tsvetnoy  
metallurgii.

OGNEV, R.K.; TER-POGOSYAN, E.D.; MAYBORODA, I.K.

Blending the electrode mass before compression. TSvet. met. 36  
no.6:55-58 Je '63. (MIRA 16:7)

(Electrodes, Carbon)

MAYBORODA, I.N.

AID P - 363

**Subject** : USSR/Engineering

**Card** : 1/1

**Author** : Mayboroda, I. N., Engineer

**Title** : Construction of garages for machine and tractor stations (MTS) from sectional reinforced concrete elements

**Periodical** : Sbor. mat. o nov. tekhn. v stroit., 5, 5-10, 1954

**Abstract** : Building Trust #26 of the Ministry of Building Constructions has built in the Brovar MTS near Kiev a new garage supported by a framework made of three-hinged reinforced concrete frames assembled from 4 identical prefabricated elements. 3 photos and 8 graphs show the details of this construction.

**Institution** : None

**Submitted** : No date

*MAYBORODA, Ivan Nikolaevich*

MAYBORODA, Ivan Nikolaevich; LYSENKO, A., red.; DANILKINA, N., red.;  
ICHKIMIS, A., tekhn.red.

[Metal forms for preparing reinforced concrete elements] Metalliche-  
skie formy dlia usgotovleniia zhelezobetonnykh izdelii. Kiev, Gos.  
izd-vo lit-ry po stroit. i arkhit. USSR, 1956. 72 p. (MIRA 11:2)  
(Precast concrete)

MAYBORODA, Ivan Nikolayevich; DANILKINA, N., red.; IOAKIMIS, A., tekhn.red.

[Technology of manufacturing and erecting large-panel walls]  
Tekhnologiya izgotovleniya i montazh krupnopanel'nykh peregorodok.  
Kiev, Gos.izd-vo lit-ry po stroit.i arkhitekt.USSR, 1957. 49 p.  
(MIRA 11:1)

(Walls)

(Precast concrete)

DEKHTYAR, Samuil Bentsionovich, inzh.; MAYBORODA, Ivan Nikolayevich, inzh.;  
MEDVEDEV, Mikhail Ivanovich, inzh.; ROKHLIN, Il'ya Aleksandrovich,  
kand.tekhn.nauk; KHUTORYANSKIY, Mikhail Semenovich, kand.tekhn.nauk;  
TUROVSKIY, B., red.; ZELENKOVA, Ye., tekhn.red.

[Useful ceramic construction elements] Effektivnye konstruksii  
iz keramik. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekt. USSR,  
1958. 355 p. (MIRA 12:2)

(Ceramics)

MAYBORODA, I.N.

Unit for making large panel partitions [Suggested by I.N. Maiboroda]

Rats. i izobr. predl. v stroi. no.6:11-14 '58. (MIRA 11:10)

(Concrete slabs)

(Walls)

MAYBORODA, I.

New designs of farm buildings. Sil'. bud. 10 no.12:9-10 D '60.

(MIRA 13:12)

1. Rukovoditel' sektora konstruksiy sel'skikh zdaniy i soorouzheniy  
Nauchno-issledovatel'skogo instituta stroitel'nykh konstruksiy Aka-  
demii stroitel'stva i arkhitektury USSR.  
(Farm buildings)

MAYBOMODA, I., inzh.

Produce prestressed reinforced concrete construction elements.

Sil'. bud. 11 no.3:11-13 Mr '61.

(MI A 14:2)

(Prestressed concrete)

MAYBORODA, I., inzh.

Manufacture of prestressed concrete elements. Sil'. bud. 11  
no.5:18-20 My '61. (MIRA 14:6)  
(Ukraine—Prestressed concrete)

MAYBORODA, I., inzh.

Precast floors and ceiling for rural buildings using brick and hollow  
ceramics. Bud. mat. i konstr. 4 no.1:31-35 Ja-F '62. (MIRA 15:7)

(Ukraine—Collective farms—Interfarm cooperation)

(Clay industries)

MAYBORODA, I.N.

Mesh-reinforced ceramic panels for roofs with prestressed reinforcement are promising products for brickyarda. Stroi. mat. det. 1 izd. no. 2:61-68 '65 (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsey Gosstroya SSSR.

VOVK, A.A.; MAYBORODA, I.S.

Coal mining in Great Britain (from "Colliery Guardian," nos. 5174,  
5176, 1960). Ugol' Ukr. 4 no. 11:41 N '60. (MIRA 13:12)  
(Great Britain--Coal mines and mining)

VOVK, A.A., referent; MAYBORODA, I.S.

Chlorate explosives in Swedish mines [from "Mining World," no.3,1958,  
no.12, 1959]. Ger.zhur.no.5:38 My '60. (MIRA 14:3)  
(Sweden--Explosives) (Finland--Explosives)

MAYBORODA, I.S.

Mining industry in the U.S.A. in 1960 (from "Engineering and  
Mining Journal," no.12, 1960). Met. i gornorud. prom. no.3:  
94-95 My-Je '62. (MIRA 15:9)  
(United States--Mines and mineral resources)

MAYBORODA, I.S.

Large-scale blasting (from "The Mining Journal," no.6594, 1962).  
Met. i gornorud. prom. no.3:95 My-Je '62. (MIRA 15:9)  
(Sweden--Blasting)

MAYBORODA, I.S. [translator]

Iron ore mining in the principal countries of the world  
in millions of tons (by years) (from foreign journals).  
Met. i gornorud. prom. no.4:94 JI-Ag '62. (MIRA 15:9)  
(Iron mines and mining--Statistics)

MAYBORODA, I.S.; GRIGORASH, A.M.

Burning of coal sludge (from "Coal Age," no.12, 1961;  
"Mining Journal," no.6599, 1961). Ugol' Ukr. 6  
no.8:45 Ag '62. (MIRA 15:11)  
(United States—Coal)

MARKIN, G.A.; MAYBORODA, I.S.

Iron ore and manganese industry in the United States during 1961.

Met. i gornorud. prom. no.3:95 My-Je '63. (MIRA 17:1)

MAYBORODA, I.S. [translator]

Diesel-powered truck [translated by I.S. Maiboroda]. Met. 1  
gornorud. prom. no. 4:94 31-Ag '63.

Boring and ore loading at the "Sendvis" mine. 94-95  
(MIRA 16:11)

DEMIDOV, P. A.; MAYBORODA, I. S.

Coal industry of England (from "Colliery Guardian," nos. 5225, 5226 and 5227, 1961, nos. 5279 and 5278, 1962; "Gluskauf," no. 9, 1962). Ugol' Ukr. 7 no.4:43-44 Ap '63.

(MIRA 16:4)

(Great Britain—Coal mines and mining)

SHKVORETS, Yu.F.; MAYBORODA, I.S.

Hydraulically powered moveable supports. Ugol' Ukr. 7 no.7:  
52-53 J1 '63. (MIRA 16:8)

(Mine timbering--Hydraulic drive)

MAYBORODA, K.S.

STREL'NIKOVA, M.M.; MAYBORODA, K.S.

Rubber-bearing ability of kok-saghyz in relation to growing conditions. Bot.smr. [Ukr.] 12 no.1:32-43 '55.

(MIRA 8:9)

1. Institut genetiki i selektsii AN URSR, laboratoriya biokhimii.

(Kok--Saghyz)

МАТЕМАТИКА - А.

PHASE I BOOK EXPLOITATION

SOV/5421

Rabinovich, Zinoviy L'vovich, Yuriy Vladimirovich Blagoveshchenskiy, Rostislav Yakovlevich Chernyak, Anna Leonidovna Gladyshevskaya, Ivan Timofeyevich Parkhomenko, Ivetta Petrovna Okulova, Lidiya Aleksandrovna Mayboroda, and Stanislav Sergeyevich Zabara.

Spetsializirovannaya elektronnyaya schetnaya mashina SESM (SESM Specialized Electronic Computing Machine) Kiyev, Izd-vo AN UkrSSR, 1961. 144 p. 5,500 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Vychislitel'nyy tsentr.

Resp. Ed.: V.M. Glushkov, Corresponding Member of the Academy of Sciences of the Ukrainian SSR; Ed. of Publishing House: I.V. Kisina; Tech. Ed.: A.M. Lisovets.

PURPOSE: This book is intended for personnel engaged in the design and operation of computing machines and also for specialists in related branches of science who are acquainted with the fundamentals of computing technique and computing mathematics.

Card 1/4

SESM Specialized Electronic Computing Machine

SOV/5421

COVERAGE: The book describes the SESM (specialized electronic computing machine), which is intended for the solution of systems of linear algebraic equations and the computation of correlation functions. The authors discuss the methods of linear algebra used in the machine, its operating principles and those of its assemblies, circuits, and components. The authors credit Academician S.A. Lebedev with the fundamental idea and outline for the machine. The book was prepared by a group of staff members of the Computing Center AS UkrSSR under the direction of Z.L. Rabinovich, Candidate of Technical Sciences, who also wrote Sections II, IV, VIII, and IX. Section I was written by Yu.V. Blagoveshchenskiy, Candidate of Physics and Mathematics; Sections III, V, and XI were written by R.Ya. Chernyak, Candidate of Technical Sciences; Sections IV, VIII, and X by I.T. Parkhomenko, Engineer; Sections IV and IX by A.L. Gladyshev, Engineer; Section VII by I.P. Okulova, Engineer; and Section VI by L.A. Mayboroda and S.S. Zabara, Engineers. The authors thank L.N. Dashevskiy, Candidate of Technical Sciences, and V.V. Kraynitskiy, S.B. Pogrebinskiy, Ye.Ye. Dedeshko, A.Z. Libman, and K.V. Golovko, Engineers. No personalities are mentioned. There are no references.

Card 2/4

KOGAN, Ye.A.; YARYM-AGAYEV, N.L.; MAYBORODA, N.F.

Calculation of saturated vapor pressure in binary systems in the case  
of chemical interaction between components in the vapor phase. Part 2.  
Zhur.fiz.khim. 37 no.7:1539-1544 J1 '63. (MIRA 17:2)

1. Donetskii politekhnicheskii institut.

MAYBORONA, N.G.

~~Determination of basic operating data for compressed gas charging~~  
stations for motor vehicles. Gaz. prom. no.5:22-25 My '58.  
(Liquefied petroleum gas) (MIRA 11:5)

*MAYBORODA, N. I.*

- USSR/Chemical Technology. Chemical Products and Their Application -- Food industry,  
I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6621

Author: Mayboroda, N. I., Kalinovskaya, V. K., Dmitriyeva, L. V., Vospen-  
nikova, A. V., Isayeva, A. V., Durakova, G. N.

Institution: Moscow Technological Institute of Meat and Dairy Industry

Title: Preparation of Dietary Products from Milk with an Increased Content  
of Dry Residue

Original

Publication: Sb. stud. rabot Mosk. tekhnol. in-t myas. i moloch. prom-sti, 1956,  
No 4, 27-32

Abstract: Concentration of dry residue of milk can be increased, for the prepa-  
ration of acidulous milk products, by a preliminary partial concen-  
tration or by addition to the natural milk of dried milk. Rapid  
increase of acidity and a more definite taste of the product were  
attained with a concentration of dry residue equal to 12-13% in the  
case of fat-free products, and of 14-15 and 18%, respectively, in the

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry,  
I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6621

Abstract: case of reduced-fat and whole-fat products. Use of a Bulgarian bacillus inoculum imparts a pleasant, sharp taste to the product, similar to that of yoghurt, and yields a product of delicately soft consistency when dry milk is used. Inoculum of mixed cultures (25% acidophilic bacillus and 75% Bulgarian bacillus) impart to the product a slight viscosity while preserving the sharp taste. Addition of 7% of beet sugar renders the sharp taste milder and reduces the aftertaste of salts and dry milk.

Card 2/2

1. MAYBORODA, N. E.
2. USSR (600)
4. Wheat
7. Combined effect of granular fertilizers and azotobacter preparation on the yield and sowing qualities of wheat seed, Sov. agron., 11, No. 2, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

MAYBORODA, N. M.

"New Methods for the Preparation of Dung and Compost, Its Action on the Yield and Quality of Potatoes, Spring Wheat, and Perennial Grasses." Cand Agr Sci, Omsk Agricultural Inst imeni S. M. Kirov, Omsk, 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)

SO: Sum. No. 598, 29 Jul 55

may Boroda, N. M.

AFANAS'YEVA, A.L., kand.biol.nauk; BAYERTUYEV, A.A., kand.sel'skokhozyaystvennykh nauk; BAL'CHUGOV, A.V., kand.sel'skokhozyaystvennykh nauk; BELOZEROVA, N.A., agronom; BELOZOROV, A.T., kand.sel'skokhozyaystvennykh nauk; MAKSIMENKO, V.P., agronom; BERNIKOV, V.V., doktor sel'skokhozyaystvennykh nauk; BOGOMYAGKOV, S.T., kand.sel'skokhozyaystvennykh nauk; VOLYNETS, O.S., agronom; BODROV, M.S., kand.sel'skokhozyaystvennykh nauk; BOGOSLAVSKIY, V.P., kand.tekhn.nauk; KHRUPPA, I.F., kand.tekhn.nauk; VERNER, A.R., doktor biol.nauk; VOZBUTSKAYA, A.Ye., kand.sel'skokhozyaystvennykh nauk; VOINOV, P.A., kand.sel'skokhozyaystvennykh nauk; VYSOKOS, G.P., kand.biol.nauk; GULDIN, M.V., inzhener-mekhanik; GERASIMOV, S.A., kand.tekhn.nauk; GORSHENIN, K.P., doktor sel'skokhozyaystvennykh nauk; YELENEV, A.V., inzhener-mekhanik; GERASKEVICH, S.V., mekhanik [deceased]; ZHARIKOVA, L.D., kand.sel'skokhozyaystvennykh nauk; ZHEGALOV, I.S., kand.tekhn.nauk; ZIMINA, Ye.A., agronom; BARANOV, V.V., kand.tekhn.nauk; PAVLOV, V.D.; IVANOV, V.K., kand.sel'skokhozyaystvennykh nauk; KAPLAN, S.M., kand.sel'skokhozyaystvennykh nauk; KATIN-YARTSEV, L.V., kand.sel'skokhozyaystvennykh nauk; KOPYRIN, V.I., doktor sel'skokhozyaystvennykh nauk; KOCHERGIN, A.Ye., kand.sel'skokhozyaystvennykh nauk; KOZHEVNIKOV, A.R., kand.sel'skokhozyaystvennykh nauk; KUZNETSOV, I.N., kand.sel'skokhozyaystvennykh nauk; LAMBIN, A.Z., doktor biol.nauk; LEONT'YEV, S.I., kand.sel'skokhozyaystvennykh nauk; ~~MAKOROVA, N.N.~~, kand.sel'skokhozyaystvennykh nauk; MAKAROVA, G.I., kand.sel'skokhozyaystvennykh nauk; MEL'NIKOV, G.A., inzhener; ZHDANOV, B.A., kand.sel'skokhozyaystvennykh nauk; MIKHAYLENKO, M.A., kand.sel'skokhozyaystvennykh nauk; MAGILEVTSEVA, N.A., kand.sel'skokhozyaystvennykh nauk;

(Continued on next card)

AFANAS'YEVA, A.L.... (continued) Card 2.

NIKIPOROV, P.Ye., kand.sel'skokhozyaystvennykh nauk; MENASHEV, M.I.,  
lesovod; PERVUSHINA, A.N., agronom; PLOTNIKOV, N.A., kand.biol.nauk;  
L.G.; kand.sel'skokhozyaystvennykh nauk; PAVLOV, V.D., kand.tekhn.  
nauk; PRUTSKOVA, M.G., kand.sel'skokhozyaystvennykh nauk; GURCHENKO,  
V.S., agronom; POPOVA, G.I., kand. sel'skokhozyaystvennykh nauk;  
PORTYANKO, A.P., agronom; RUCHKIN, V.N., prof.; RUSHKOVSKIY, T.V.,  
agronom; SAVITSKIY, M.S., kand.sel'skokhozyaystvennykh nauk; BOLDIN,  
D.T., agronom; NESTEROVA, A.V., agronom; SERAFIMOVICH, L.B., kand.  
tekhn.nauk; SMIRNOV, I.N., kand.sel'skokhozyaystvennykh nauk;  
SERNBRYANSKAYA, P.I., kand.tekhn.nauk; TOKHTUYEV, A.V., kand. sel'sko-  
khozyaystvennykh nauk; FAL'KO, O.S., iznh.; FEDYUSHIN, A.V., doktor  
biol.nauk; SHEVLYAGIN, A.I., kand.sel'skokhozyaystvennykh nauk;  
YUFEROV, V.A., kand.sel'skokhozyaystvennykh nauk; YAKHTENFEL'D, P.A.,  
kand.sel'skokhozyaystvennykh nauk; SEMENOVSKIY, A.A., red.; GOR'KOVA,  
Z.D., tekhn.red.

[Handbook for Siberian agriculturists] Spravochnaya kniga agronoma  
Sibiri. Moskva, Gos. izd-vo sel'khoz. lit-ry. Vol.1. 1957. 964 p.  
(Siberia--Agriculture) (MIRA 11:2)

MAYBORODA, N.M.

BARSUKOV, N.I., kand.sel'skokhozyaystvennykh nauk; KIZYURIN, A.D., doktor sel'skokhozyaystvennykh nauk; BORINEVICH, V.A., kand.sel'skokhozyaystvennykh nauk; BORMUSOVA, S.H., agronom; VERMENICHEVA, M.D., kand.sel'skokhozyaystvennykh nauk; GESHELE, E.E., doktor biol. nauk; GOROKHOV, G.I., kand.sel'skokhozyaystvennykh nauk; GUBKIN, S.M., kand. veterinarnykh nauk; YELYKOVA, L.I., kand.sel'skokhozyaystvennykh nauk; KOTT, S.V., doktor biol. nauk; KOCHKINA, V.A., agronom; LAMBIN, A.Z., doktor biol.nauk; LEBEDEVA, Ye.M., agronom; MALAKHOVSKIY, A.Ya., doktor sel'skokhozyaystvennykh nauk; MAYBORODA, N.M., kand. sel'skokhozyaystvennykh nauk; MAYDANYUK, A.E., zootekhnik; OVSYANNIKOV, G.Ye., kand.sel'skokhozyaystvennykh nauk; PETROV, F.A., kand.biol.nauk; POGORELOV, P.F., agronom; POLKOSHNIKOV, M.G., dotsent; RENARD, G.K., kand. sel'skokhozyaystvennykh nauk; RUCHKIN, V.N., prof.; SADYRIN, M.M., kand.sel'skokhozyaystvennykh nauk; TOBOL'SKIY, V.YA., vetvrach; TYAZHEL'NIKOV, S.D., kand.sel'skokhozyaystvennykh nauk; UKHIN, I.I., kand.sel'skokhozyaystvennykh nauk; FEDOROV, G.V., kand.sel'skokhozyaystvennykh nauk; CHIRKOV, D.I., zootekhnik; ZINGOVATOV, V.A., prof.; SHVETSOVA, A.N., kand.sel'skokhozyaystvennykh nauk; SHEVLYAGIN, A.I., kand.sel'skokhozyaystvennykh nauk; SEMENOVSKIY, A.A., red.; GOLUBINSKAYA, Ye.S., red.; MECHAYEVA, Ye.G., red.; PERESYPKINA, Z.D., tekhnicheskij red.

[Siberian agronomist's reference manual] Spravochnaya kniga agronomov Sibiri. Moskva, Gos. izd-vo sel'khoz. lit-ry, Vol.2. 1957. 839 p.  
(Siberia--Agriculture) (MIRA 11:3)

*Mayboroda, N.M.*

**MAYBORODA, N.M.**

Using the hydric method for determining soil moisture. Pochvovedenie  
no.8:101-103 Ag '57. (MIRA 10:11)

1. Krasnoyarskiy sel'skokhozyaystvennyy institut.  
(Soil moisture)

USSR/Soil Science - Organic Fertilizers.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86814

Author : Mayboroda, N.M.

Inst : Omsk Agriculture Institute

Title : Effect of Manure and Composts on the Yield and Quality of  
Agricultural Crops.

Orig Pub : Tr. Omskogo s.-kh. in-ta, 1957, 22, No 1, 45-52

Abstract : Various methods of preparing manure and composts and their effect on the crop yield were studied in field and vegetation experiments in 1952-1954 in the Western Siberia. conditions in average-humus chernozem. In I M prepared with addition of 12 kg/t P<sub>2</sub>O<sub>5</sub>, the microorganisms were greater in quantity, the combustion temperature was raised by 2 to 4°, the period for preparation of fertilizer was shortened by 17 to 19 days, the nitrates were increased 2 to 6 times

Card 1/2

USSR/Soil Science - Organic Fertilizers.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86814

in quantity. M with the addition of  $P_c$  facilitates the accumulation in the soil of nitrates and assimilable  $P_2O_5$ , and during spreading on the field loses 10 times less  $NH_3$  than without  $P_c$ . Most effective is M with  $P_c$  in straw cutting stored in a trench. M and compost with  $P_c$  and liquid fertilizers raised the crop yield (by 41.9 - 44.7 centners/hectare) and marketability (by 16.8 to 24.9%) of potato tubers, the yield of starch (by 544 to 749% kg/ha), the content of vitamin C and lowered the solanine quantity. M with  $P_c$  raised the crop yield (by 4.1 - 6.9 centners/hectare) and the quality of spring wheat grain. -- B.D. Aleglan

Card 2/2

- 50 -

MAYBORODA, N.M.

Krasnoyarsk Branch of the All-Union Society of Soil Scientists.  
Pochvovedenie no.5:114 My '58. (MIRA 11:6)  
(Krasnoyarsk Territory--Soil research)

MAYBORODA, N.M.

Using the method of acid extracts for determining ammonium in soil. Pochvovedenie no. 2:100-103 F '61. (MIRA 14:2)

1. Krasnoyarskiy sel'skokhozyaystvennyy institut.  
(Soils--Analysis) (Ammonia)

MAYBORODA, N. M.

Taking soil samples in studying the dynamics of nutrients.  
Pochvovedenie no.7:112-113 Ji '62. (MIRA 15:10)

1. Krasnoyarskiy sel'skokhozyaystvennyy institut.

(Soils—Analysis)

MAYBORODA, N.M., kand.sel'skokhozyaystvennykh nauk; GLUSHKOV, K.I.;  
KALYUSHKIY, G.S.

Krasnoyarsk phosphorites. Zemledelie 24 no.3:79-80 Mr '62.  
(MIRA 15:3)

1. Glavnyy agronom-inspektor Krasnoyarskogo krayssel'khozupravleniya  
(for Glushkov). 2. Nachal'nik laboratorii Sibirskogo proyektnogo  
nauchno-issledovatel'skogo instituta tsvetnoy metallurgii (for  
Kalyushkiy).

(Krasnoyarsk Territory--Phosphates)

SAPOZHNIKOV, Yefim Nus'yevich, inzh.; RODIONOV, Vasilii Nikolayevich,  
inzh.; GARASHCHENKO, Grigoriy Matveyevich, inzh.;  
MAYBORODA, N.V., inzh., retsenzent;

[Manual for an amateur navigator] Posobie sudovoditeliu-  
liubiteliu. Izd.2., perer. i dop. Kiev, Izd-vo "Tekhnika,"  
1964. 277 p. (MIRA 17:5)

MAYBORODA, P. A. inzh.

Analysing the performance of bottled-gas automobiles. Avt. transp.  
36 no. 4:22-23 Ap '58. (MIRA 11:4)

1. Nauchno-issledovatel'skiy institut Ukrdortrans.  
(Automobiles--Engines (Compressed gas))

MAYBORODA, P.G.

~~Ways of increasing the economy of the performance of automobiles~~  
using compressed gases. Gaz. prom. 4 no.11:35-38 '59.

(MIRA 13:2)

(Automobiles--Engines (Compressed-gas))

MAYBORODA, P.; SAVCHENKO, V.

Centralization and function of automotive transportation units.  
Avt. transp. 42 no.8:18 Ag '64. (MIRA 17:10)

AGRANAT, P.; ALEKSANDROVA, S.; LUTSKER, G.; MAYBORODA, P.

Efficiency of the concentration of loading and unloading  
operations at key stations. Avt. transp. 42 no.8:32-34  
Ag '64. (MIRA 17:10)

1. Gruzovaya sluzhba Yugo-Zapadnoy zheleznoy dorogi (for  
Agranat). 2. Ukrainskiy dorozhno-transportnyy nauchno-  
issledovatel'skiy institut (for Aleksandrova, Lutsker,  
Mayboroda).

ACCESSION NR: AT4007046

S/2598/63/000/010/0234/0244

AUTHOR: Kornilov, I.I.; Mikheyev, V.S.; Andreyev, O.N.; Mayboroda, P.S.

TITLE: Heat resistance of some titanium alloys at 450-700 C

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy\*, no. 10, 1963.  
Issledovaniya titanovy\*kh splavov, 234-244

TOPIC TAGS: titanium alloy heat resistance, titanium alloy, OT-4 alloy, OT-4-2 alloy, AT-3 alloy, AT-4 alloy, AT-6 alloy, AT-8 alloy, AT-9-0 alloy, AT-10 alloy, AT-10-0 alloy, AT-12 alloy, Ti sub 3 Al base alloy, titanium aluminum alloy, titanium aluminum manganese alloy, titanium aluminum vanadium alloy, VT-5-1 alloy, VT-14 alloy

ABSTRACT: The heat resistance of the VT-1, VT-5-1, VT-14, OT-4-2, AT-3, AT-4, AT-6, and AT-8 alloys was tested by a simple centrifugal method to determine the creep limit under thermal loads. Tests were carried out under loads of 20 kg/mm<sup>2</sup> at temperatures up to 700 C; specifically, tests were conducted at 450 C for 5000 hours, at 500 C for 250 hours, at 550 C for 100 hours, at 600 C for 50 hours, and at 700 C for 500 hours. Isotherms for the tested conditions were plotted. It was concluded that the VT-1 and VT-14 alloys are not heat resistant at any of the temperatures. The highest heat resistance at 600-700 C was shown by the AT-10 and AT-12 alloys, which contain

Cord 1/2

ACCESSION NR: AT4007046

7 or 8 alloying elements, and the ST-2 alloy, which contains  $Ti_3Al$  as a main component. The AT-3 and AT-4 alloys showed good heat resistance up to 500 C and the AT-6 alloy up to 550 C. The AT-8 alloy, containing Al, Cr, Fe, Si, and B on a base of  $\alpha$ -titanium showed a greater heat resistance at higher temperatures (up to 600 C) than the OT-4 and OT-4-2 alloys containing Ti, Al, and Mn. or Ti, Al, and V with an  $\alpha + \beta$  structure and VT-6 or VT-5-1 alloys containing Ti, Al, and Sn. It was proved that the heat resistance is increased by alloying with many elements. The heat resistance of the alloys containing six alloying elements increased in the direction AT-3  $\rightarrow$  AT-4  $\rightarrow$  AT-6  $\rightarrow$  AT-8 as their aluminum content increased. This was explained by the increase in the temperature of the  $\alpha \rightleftharpoons \beta$  transformation and the strengthening of the  $\alpha$  solid solution. Orig. art. has: 10 figures and 2 tables.

ASSOCIATION: Institut metallurgii AN SSSR (Metallurgical Institute, AN SSSR)

SUBMITTED: 00

DATE ACQ: 27Dec63

ENCL: 00

SUB CODE: ML

NO REF SOV: 016

OTHER: 000

Card

2/2

*MAYBORODA, S.K.*

**MAYBORODA, S.K.**

Cutting-tool holders in lathes used for machining shafts with  
stepped and shaped profiles. Stan. 1 instr. 28 no.10:36-37 0 '57.  
(Cutting tools) (MIRA 10:11)

25.2000

66948

SOV/123-59-14-55123

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 14, p 91 (USSR)

AUTHOR: Mayboroda, S.K.

TITLE: Modernization<sup>14</sup> of the Semiautomatic Multicut Lathes<sup>14</sup> of the 116-2 Type  
to Adapt Them to Copying Operations

PERIODICAL: Tekhnol. avtomobilestroyeniya, 1958, Nr 5, pp 77 - 80

ABSTRACT:

A modernization of the semiautomatic lathes of the 116-2 model was carried out at the Gor'kiy Automobile Plant in order to adapt them to copying operations under high-speed conditions. The spindle speed was increased to 800 rpm, on account of a change in the gear ratio of a pair of gears. By an adjustment of the changeable gears, the revolving mechanism of the distribution shaft is imparted the necessary speed. This modernization made it possible to machine the given machine part, with the aid of hard alloy cutters, by the master form at a cutting speed of 50 - 100 m/min. The adjustment of the modernized lathe of the 116-2 model for the machining of the secondary shaft of the gear box is described in detail. In view of a non-uniformity of allowance the cam of the longitudinal feed is a composite one, with a variable lift of the spiral. This ensured the following

Card 1/2

66948

SOV/123-59-14-55123

Modernization of the Semiautomatic Multicut Lathes of the 116-2 Type to Adapt Them to Copying Operations

feeds of the longitudinal carriage: 0.1 mm/revolution over a length of 22 mm, 0.3 mm/revolution over a length of 74 mm and 0.4 mm/revolution over a length of 49 mm. In order to attain a uniform utilization of the lathes in time and a uniform adjustment of the cams on the drums of the distribution shaft, the machine part is turned over the half of its length on one lathe, while the second half is machined on the second lathe, i.e. in two operations instead of three, as it was formerly the case; the number of cutters on the longitudinal carriage is now two instead of 17. The modernization method described is applicable for the "Fey-12", "Fey-8" and other analogous lathes. 4 figures.

L.V.G.

Card 2/2

*MAYBORODA, S.K.*

AUTHORS: Mayboroda, S.K., Engineer, Misharov, A.F. SOV-117-58-8-3/28

TITLE: Modernization of a Turning Lathe for the Boring of Openings and the Cutting of Faces (Modernizatsiya tokarnogo stanka dlya rastochki otverstiy i podrezki tortsov)

PERIODICAL: Mashinostroitel', 1958, Nr 8, pp 15-16 (USSR)

ABSTRACT: The boring of openings and the cutting of faces in a motorcar cylinder block is a very precise operation. For the production of the motorcars "Volga", special machines had been ordered which were not ready in time. For that reason, the turning and screw-cutting lathe 1A63 was modernized. The cylinder block is fastened by a pneumatic clamp. In Figure 3, the cross section of the chuck in the back mandrel is shown. If the spindle is switched on, the chuck with the boring cutter is turned. The rack is moved in the longitudinal direction by an additional electromotor. Figure 4 shows the chuck with cutters and rack mechanism. Chucks of this design ensure a high degree of precision. The improvement of the lathe is not complicated and may be carried out in the tool workshop of every plant. There are 3 diagrams and 1 photo.

1. Lathes - Applications

Card 1/1

MAYBORODA, S.K.

Broaching irregularly shaped and nonsymmetrical holes. Stan.i instr.  
29 no.12:34-35 D '58. (MIRA 11:12)  
(Metal cutting)

MAYBCRODA, S.K., insh.

Mechanizing the removing of bushing faces. Mashinostroitel' no.1:  
42-43 Ja '59. (MIRA 12:2)

1. Gor'kovskiy avtozavod.  
(Machine-shop practice)

AUTHOR: Mayboroda, S.K., Engineer

SOV/122-59-2-20/34

TITLE: Fixing and Clamping Workpieces When Turning at High  
Production Rates (Ustanovka i zakrepleniye detaley pri  
vysokoproizvoditel'nom tochenii)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, pp 57-58 (USSR)

ABSTRACT: Design for an adjustable front work centre is shown in Fig 1. The taper sleeve fits into the lathe headstock spindle and the actual centre can be brought forward by the adjusting screw at the back and be locked by the collet at the front. Design for a swing jaw type chuck is shown in Fig 2, 3 and 4. The axis joining the swing jaw centre to the work centre should be at an angle of 12 to 15° to the axis joining the point of contact of the jaw to the centre from which the peripheral arc of the jaw is machined. Formulae for calculating the required dimensions of swing jaws to achieve this are given. Details of the preferred toothed profile for the swing jaws are shown. There are 4 figures.

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MAYBORODA, S.K., inzh.

Chucks for boring holes and surfacing. Mashinostroitel' no.11:17-19  
# '59.

(MIRA 13:3)

(Chucks)

MAYBORODA, S.K..

Increasing the output of multi-cut lathes. Stan. 1 instr. 30  
no.1:17-19 Ja '59. (MIRA 12:1)  
(lathes)

MAYBORODA, S.K.

Measuring broaches with circumferential groove profiles. Stan. 1 instr.  
30 no.2:32-33 P '59. (MIRA 12:3)  
(Broaching machinery)

MAYBORODA, S.K., inzh.

Chuck for boring annular grooves. Mashinostroitel' no.5:17 My  
'60. (MIRA 14:5)

(Chucks)

MAYBORODA, S.Z., inzh.

Investigating the deformability of materials on vibrating  
units. Mashinostroenie no.3:21-22 M-Je '63.

(MIRA 16:7)

1. Kiyevskiy ordena Lenina politekhnicheskoy institut.  
(Deformations(Mechanics)—Testing)

DASHEVSKIY, I.Ya., inzh.; MAYBORODA, T.A., inzh.

Push conveyors at the Dnepropetrovsk Tire Plant. Mekh.i avtom.  
proizv. 16 no.7:27-31 J1 '62. (MIRA 15:8)  
(Dnepropetrovsk--Tires, Rubber)  
(Dnepropetrovsk--Conveying machinery)

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87433  
S/191/60/000/010/005/017  
B004/B060

AUTHORS: Losev, I. P., Datskevich, L. A., Mayboroda, V. D.  
TITLE: Synthesis and Investigation of Foam Plastics From Polyesters  
of Terephthalic Acid and 2,4-Toluylene Diisocyanate  
PERIODICAL: Plasticheskiy massy, 1960, No. 10, pp. 14-16

TEXT: The authors based on Western papers to synthesize foam plastics from polyesters of terephthalic acid and 2,4-toluylene diisocyanate. The polyesters were synthesized by allowing diethylene glycol, triethylene glycol or glycerin to enter into reaction with dimethyl terephthalic acid in the presence of 1% NaOH in a ratio of 2 : 1 to 1.2 : 1 in nitrogen atmosphere with a slow increase (16 h) of temperature to 200°C. A mixture was prepared from the polyester (molecular weight 700-1500, hydroxyl number 400-80), the emulsifier OT-10 (OP-10), water, and triethyl amine, 30-50% 2,4-toluylene diisocyanate was added under vigorous stirring, and the mixture was then allowed to harden at 70-80°C in a thermostat. The weight by volume was controlled by the water addition:

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Synthesis and Investigation of Foam Plastics  
From Polyesters of Terephthalic Acid and  
2,4-Toluylene Diisocyanate

S/191/60/000/010/005/017  
B004/B060

g water per 100 g polyester	0.5	1.0	2.0	3.0	4.0	5.0
weight by volume of foam plastic,	183	113	72	60	57	52
kg/m <sup>3</sup>						

The total volume of pores amounted to 91-97% of the sample volume. The maximum water adsorption (in compliance with ГOCT 4650-49, GOST 4650-49) amounted to 20-30 g/dm<sup>3</sup>. The compressive strength was determined according to ГOCT 4651-49 (GOST 4651-49), the bending strength according to ГOCT 4648-56 (GOST 4648-56) (5.4 kg/cm<sup>2</sup> for 60 kg/m<sup>3</sup> weight by volume), and the intrinsic resilience according to ГOCT 4647-55 (GOST 4647-55). The heat resistance, determined according to Zhurkov, was 100-130°C. All foam plastics were hardly inflammable and were quickly extinguished after removal from the flame. Foam plastics with weight by volume 160-220 kg/m<sup>3</sup> are usable in civil construction, aircraft and automobile building. The plastics with weight by volume 50-100 kg/m<sup>3</sup> are suitable for heat insulation and as floating materials. There are 16 references: 2 Soviet, 5 US, 3 British, and 6 German.

Card 2/2

ACCESSION NR: AT4033988

S/0000/63/000/000/0073/0075

AUTHOR: Datskevich, L. A.; Mayboroda, V. D.; Losev, I. P. (Deceased)

TITLE: ~~Synthesis and analysis of polyester urethans containing phosphorus.~~  
1. Reaction of phenylphosphoric acid dichloroanhydride with diethylene glycol

SOURCE: Geterotsepny\*ye vy\*sokomolekulyarny\*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 73-75

TOPIC TAGS: diethylene glycol, phenylphosphoric acid dichloroanhydride, polyester urethan, polycondensation, polycondensation kinetics, second order reaction, reaction rate temperature dependence, phosphorus containing polyester urethan, urethan

ABSTRACT: Equimolecular proportions of diethylene glycol and phenylphosphoric acid dichloroanhydride were polycondensed in solution to study the kinetics of the process at 40-80C. Analysis of the results indicates a second order reaction up to conversion levels of 70%. The activation energy was calculated as 10.6 kcal/mol. The temperature had a significant effect on the reaction rate constant ( $3.58 \cdot 10^{-4}$  and  $22.3 \cdot 10^{-4} \text{ l} \cdot \text{mol}^{-1} \cdot \text{sec}^{-1}$  at 40 and 80, respectively), the temperature coefficient (1.73 and 1.45, respectively) and the rate of reaction (33 and 71%, respectively after 2 min.). The polyester obtained was a colorless, highly viscous liquid, with molecular weight about 2000. Orig. art. has: 4 graphs, 1 table and

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ACCESSION NR: AT4033988

3 formulas.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im. D. I. Mendeleyeva  
(Moscow Institute of Chemical Technology)

SUBMITTED: 23Jun62

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: OC

NO REF SOV: 001

OTHER: 000

Card 2/2

ACCESSION NR: AT4034010

S/0000/63/000/000/0243/0245

AUTHOR: Datskevich, L.A.; Mayboroda, V.D.; Losev, I.P. (Deceased)

TITLE: Synthesis and investigation of phosphorus-containing polyesterurethans.  
II. The reactivity of the dichloroanhydrides of substituted phenylphosphoric acids

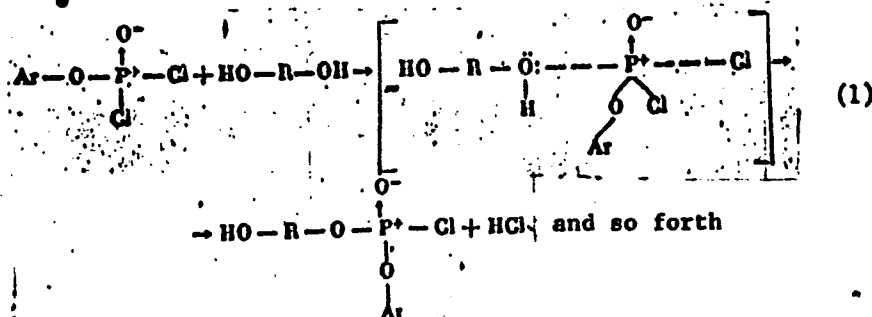
SOURCE: Geterotsepny\*ye vy\*sokomolekulyarny\*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 243-245

TOPIC TAGS: polymer, phosphorus containing polymer, urethan polymer, polyesterurethan, phosphorus containing polyesterurethan, phenylphosphate, phenylphosphoric acid dichloroanhydride fireproof material

ABSTRACT: In a study of the reactivity of dichloroanhydride-substituted phenylphosphoric acids, the kinetics of the latter's interaction with diethyleneglycol was investigated at 50C and the reaction rate constants for different substituted products were graphically determined. The following scheme is offered to represent the reaction mechanism:

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ACCESSION NR: AT4034010



in which Ar stands for phenyl, p-chlorophenyl, p-bromophenyl, p-nitrophenyl, p-methylphenyl, m-methylphenyl and tertiary n-butylphenyl, involved in the study. Electropositive substitutes, present in the benzene ring of a dichloro-anhydride, were found to slow down the polycondensation reaction and to accelerate the electronegative reaction. Synthesis of fireproof film materials is believed to be feasible from P-containing polyesters and diisocyanates. Orig. art. has: 2 tables and 2 figures.

Card 2/3

ACCESSION NR: AT4034010

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im. D. I. Mendeleeva  
(Moscow Chemical Technology Institute)

SUBMITTED: 26Apr63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: OC, MI

NO REF SOV: 003

OTHER: 000

Card 3/3

ACCESSION NR: AP4043790

S/0190/64/006/008/1498/1500

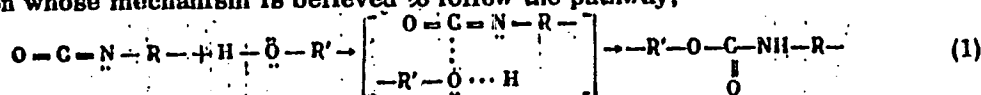
AUTHOR: Datskevich, L. A., Mayboroda, V. D., Losev, I. R.

TITLE: Synthesis and investigation of phosphorus-containing polyesterurethanes. III

SOURCE: Vy\*sokomolekulyarny\*ye soyedineniya, v. 6, no. 8, 1964, 1498-1500

TOPIC TAGS: polyesterurethane, urethane, phosphorylated polymer, polymerization kinetics, phenylphosphoric acid, triethylene glycol, hexamethylene diisocyanate

ABSTRACT: Phosphorus-containing polyesterurethanes were synthesized from 1,6-hexamethylenediisocyanate and a polymer based on triethyleneglycol and the dichloroanhydride of phenylphosphoric acid, in the absence of a solvent, in order to expand the practical uses of a reaction whose mechanism is believed to follow the pathway;



Equimolar amounts of the cyanate and the polymer were reacted at 60, 70, 80, 90 and 100C in a testtube provided with a mechanical mixer for a period of 3-6 hrs, during which time the isocyanate number and the refractivity were periodically determined to follow the dynamics

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ACCESSION NR: AP4043790

of the reaction. From calculations and curves it was found that the reaction rate increases sharply with temperature, there is an inverse relationship between the coefficient of refraction and the isocyanate number, the activation energy of the reaction is 17.9 Kcal/mol, and the reaction is second-order. Orig. art. has: 1 table, 5 figures, 2 formulas and 2 chemical equations.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut imeni D. I. Mendeleyeva (Moscow Institute of Chemical Technology).

SUBMITTED: 05Oct63

SUB CODE: OC

NO REF SOV: 002

OTHER: 001

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L 12011-65 EWT(1)/EPF(1)/EPR/EWP(1)/T PC-4/Pr-4/PS-4 RPL WW/RM  
ACCESSION NR: AP4047221 S/0190/64/006/010/1907/1910

AUTHOR: Maybomoda, V. D.; Datskevich, L. A.

TITLE: Polycondensation of phenyl phosphorodichloridate with  
diethylene glycol

SOURCE: Vyssokomolekulyarnyye soedineniya, v. 6, 10, 1964,  
1907-1910

TOPIC TAGS: polycondensation, polyester, phosphorus containing poly-  
ester, phenyl phosphorodichloridate, diethylene glycol, polyurethane

ester, phenyl phosphorodichloridate, diethylene glycol, p-  
ABSTRACT: Communication 4 of the series "Synthesis and investigation of phosphorus-containing polyester-urethans" reports a study of the polycondensation of phenyl phosphorodichloridate with diethylene glycol in a 1/1 molar ratio in the melt at 40—80C. A polyester, linear in structure and with little branching, was obtained, which reacts with 1,6-hexamethylene diisocyanate to form a polyurethan. The effect of polycondensation temperature and time on the degree of completion, polyester yield, intrinsic viscosity, and polyester refractive index was studied. The maximum degree of completion was

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ACCESSION NR: AP4047221

96—98% at 60, 70, and 80C and a 1-hr reaction time. The maximum polyester yield of 90—93% was attained at 40—50C and a 5-hr reaction time. The observed increase in refractive index and intrinsic viscosity in the course of the polycondensation indicates a rise in the molecular weight of the polyester with reaction time. Despite the near completion of the polycondensation after 0.5—2 hr, further

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im.  
O. I. Mandel'staya (Moscow Chemical Technology Institute).

SUBMITTED: 27Dec63

ATD PRESS: 3122

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SUB CODE: 01, GC

NO REF SQ: 002

OTHER: 000

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